



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁵ : C07H 17/00	A1	(11) International Publication Number: WO 92/03461 (43) International Publication Date: 5 March 1992 (05.03.92)
(21) International Application Number: PCT/US91/05939 (22) International Filing Date: 20 August 1991 (20.08.91) (30) Priority data: 573,648 24 August 1990 (24.08.90) US (71) Applicant: IXSYS, INC. [US/US]; 3550 General Atomics Court, Suite L103, San Diego, CA 92121 (US). (72) Inventor: HUSE, William, D. ; 471 Avenida Primavera, Del Mar, CA 92014 (US). (74) Agents: CAMPBELL, Cathryn et al.; Pretty, Schroeder, Brueggemann & Clark, 444 South Flower Street, Suite 2000, Los Angeles, CA 90071 (US). TOP 544809		(81) Designated States: AT (European patent), AU, BB, BE (European patent), BF (OAPI patent), BG, BJ (OAPI patent), BR, CA, CF (OAPI patent), CG (OAPI patent), CH (European patent), CI (OAPI patent), CM (OAPI patent), CS, DE (European patent), DK (European patent), ES (European patent), FI, FR (European patent), GA (OAPI patent), GB (European patent), GN (OAPI patent), GR (European patent), HU, IT (European patent), JP, KP, KR, LK, LU (European patent), MC, MG, ML (OAPI patent), MN, MR (OAPI patent), MW, NL (European patent), NO, PL, RO, SD, SE (European patent), SN (OAPI patent), SU*, TD (OAPI patent), TG (OAPI patent). Published <i>With international search report.</i>
(54) Title: METHODS OF SYNTHESIZING OLIGONUCLEOTIDES WITH RANDOM CODONS (57) Abstract The invention provides a method of synthesizing oligonucleotides having random triplets using individual monomers. The steps consist of: (1) sequentially coupling monomers on separate supports to form at least two different triplets, the coupling is performed in separate reaction vessels; (2) mixing the supports from the reaction vessels; (3) dividing the mixed supports into two or more separate reaction vessels; and (4) repeating steps (1) through (3) one or more times in the reaction vessels of step (3), wherein the last step ends at step (2). Additionally, the oligonucleotides can be cleaved from the supports.		